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Hand Protection

We use are hands so constantly, for so many things, that we often take them for granted. In doing so we also put them in harms way without thinking of the end result should something go wrong. Just think about the qualities of your hands: strength, flexibility, sensitivity, and coordination. Now, think about what you would do without them or with just one. Due to the fact that the hands are so often taken for granted, hands and fingers are among the most frequently injured parts of the body. The National Safety Council reports that there were 530,000 disabling hand and finger injuries. Most of these injuries can be prevented by paying attention to your hands, by keeping them out of harms way. There are several ways to do this and still get the job done properly and safely. First, always use the protective equipment provided for any machinery you may be using. Also the use of gloves, not just any gloves, the right gloves for the job. If you do these two things along with paying attention you can keep your most useful "tools" in good condition.

General Hazards

Just about anything in the workplace can be a hand hazard; hand or power tools, chemicals, scrap materials, cold, heat or fire. In a work environment such as we have here at LaRC there are numerous industrial shops, chemical laboratories, research labs, wood, metal, and composite labs. In the front lines of all our work is the two pieces of machinery that you cannot make or buy, your hands. Most hand and finger injuries fall into these categories: Traumatic: These injuries range from cuts and punctures to broken bones and to the worst case, AMPUTATION!! Many cuts, scraps, and punctures are minor at first but when not properly treated can easily become infected. Contact: These are the injuries that we get by direct contact with hot or cold objects, chemicals, detergents or metals. Most of us have had some sort of contact injury involving the hands at one time or the other. You may also get a skin disease known as dermatitis. Dermatitis usually shows up immediately after contact with a chemical, but can also take a while to develop an allergic type reaction. Once you have an allergic reaction to a certain chemical , you usually can't get near that chemical again. Carpal Tunnel Syndrome: This condition is caused by doing the same movement over and over again with the wrist and hands. This problem will be addressed in a future newsletter.

Protection Against Hazards

The first way to protect yourself is to make sure any equipment that you use is in proper working condition. This does not mean that a grinder grinds and a cutter cuts. This means that all supplied safety guards are in place and in good repair before use.

One of the best ways to protect your hands are gloves, and as in most protective equipment you must use the right glove for the process you are involved with. There are a number of various types of gloves available and many look alike. Make sure when you are working with chemicals you check the MSDS to determine the best glove choice. The choice is made to assure that the chemical, heat, voltage or other substance is kept from your hands. Also you want to make sure that the material of the gloves will not react with the material you are working with in a dangerous way.

Safety Procedures

If all the machines had all the guards and we had the nicest gloves money could buy, fingers and hands would still be injured. But if we take the responsibility for doing jobs in a safe and sensible way, that will keep our hands out of harms way.

Machinery and Tools:

* Follow the manufacturer's instructions
* Feed materials with a push stick
* Keep hands away from moving machine parts
* Always cut away from your body
* Use brushes, not hands to sweep up wood or metal chips
* Check materials for sharp edges, burrs, and splinters
* Make sure you know the temperature of an object before handling
* Lift so your hands are not near the pinch points
* Put materials down carefully not to smash your fingers
* Use the right tool for the right job and use it correctly
* Store tools so no sharp edges are exposed
* Pass - don't throw - tools to other workers, handle first

Gloves

* Inspect before wearing, for holes, rips and cleanliness
* Rinse gloves thoroughly before removing them
* Store gloves in a cool, dark, dry place
* Store right side out
* Don't fold the cuffs over it will weaken the material.

Even when you are wearing gloves and are working with chemicals there are certain precautions you should take:

* Bandage any small cuts or scrapes before putting on gloves
* Keep chemical containers closed when not in use
* Wash hands frequently with soap and water after working with chemicals
*Do not use solvents or industrial detergents to clean hands

Now you can do a quick check of your machinery to check for safety guards or safety equipment for the unit. You can also check your gloves for serviceability as well if they are the proper glove for the job.

Hearing Loss Symptoms

How can you tell if you are losing your hearing? It's not easy, but here are some signs:

* Noise or ringing in your ears
* Trouble hearing people when they speak
* Trouble hearing certain high or soft sounds
* Needing the volume higher on TV or radio, so much that others complain

Protection Against Hazards

The primary method used to protect our hearing is the use of ear plugs or muffs. In some cases there is a need for both plugs and muffs to be worn at the same time. I would like to bring to your attention that the plugs and muffs are designed to reduce the hazardous noise and let the sounds in the speech frequencies pass through. The next time you are in a high noise area with your ear protection on talk to someone and listen to them you will find that you can still communicate while protecting your hearing. Any questions that you may have concerning the LaRC noise control and hearing conservation program refer to LHB 2710.1.